Claims:

- 1. An enzymatically prepared fat base composition comprising a mixture of vegetable-derived triglycerides, characterized in that:
 - the total palmitic acid residues content is at most 38% of the total fatty acid residues;
 - at least 60% of the fatty acid moieties at the sn-2 position of the glycerol backbone are palmitic acid residues.
- 2. The fat base composition of claim 1, wherein at least 62% of the total palmitic acid residues are at the sn-2 position of the glycerol backbone.
- 3. The fat base composition of claims 1 or 2, wherein at least 70% of the fatty acid moieties at the sn-1 and sn-3 positions of the glycerol backbone are unsaturated.
- 4. The fat base composition of any one of claims 1 to 3, wherein at least 40%, preferably 40-60%, of said unsaturated fatty acid moieties at the sn-1 and sn-3 positions are oleic acid moieties.
- 5. The fat base composition of any one of claims 1 to 4, wherein at least 6%, preferably 6-17%, of said unsaturated fatty acid moieties at the sn-1 and sn-3 positions are linoleic acid moieties.
- 6. A substitute human milk fat composition comprising a blend of at least 25% of the fat base composition of any one of claims 1 to 5 with up to 75% of at least one vegetable oil.

- 7. The substitute human milk fat composition of claim 6, wherein said vegetable oil may be selected from the group comprising soy oil, palm tree oil, canola oil, coconut oil, palm kernel oil, sunflower oil, corn oil and rapeseed oil.
- 8. An infant formula comprising the substitute human milk fat composition of any one of claims 6 and 7.
- 9. An infant formula comprising at least one protein component and at least one fat component, wherein said fat component is the substitute human milk fat composition of any one of claims 6 and 7, further optionally comprising vitamins, minerals, nucleotides, amino acids and carbohydrates.
- 10.A process for the preparation of the fat base composition of any one of claims 1 to 5, comprising the steps of:
 - (a) reacting a palmitic acid rich oil with unsaturated fatty acids, preferably oleic acid, in the presence of an insoluble catalyst;
 - (b) removing the catalyst;
 - (c) distilling the excess free fatty acids;
 - (d) bleaching the oil; and optionally
 - (e) deodorization of the product of step (d).
- 11. The process of claim 10, optionally further comprising a step of fractionation preceding the deodorization step (e).
- 12.A process for the preparation of the substitute human milk fat composition of any one of claims 6 and 7, comprising admixing said vegetable oil with the fat base composition of any one of claims 1 to 5.

WO 2005/036987 PCT/IL2004/000960

29

- 13. Use of the fat base composition of any one of claims 1 to 5 in the preparation of a substitute human milk fat composition for infant formulae.
- 14. Use of the fat composition of any one of claims 6 and 7 in the preparation of an infant formula.